



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

729 N.E. Oregon, Suite 200, Portland, Oregon 97232

Telephone (503) 238-0667

Fax (503) 235-4228

www.critfc.org

WINTER WEATHER 2005 - 2006 FORECAST

Oregon Chapter-American Meteorological Society Meeting, November 4th, 2005

Kyle Dittmer, *Hydrologist- Meteorologist*

Climate prediction tools used:

1. Australian Bureau of Meteorology—ENSO guide (<http://www.bom.gov.au/climate/enso/>).
2. Assume “**ENSO-neutral conditions**” plus cold & warm phase Pacific Decadal Oscillation.
3. Analog Water Years (October 1 through September 30): 1929, 1933, 1935, 1936, 1937, 1946, 1947, 1948, 1949, 1953, 1954, 1957, 1960, 1961, 1962, 1967, 1979, 1981, 1982, 1990, 1991, 1993, 1994, 2002, 2004 and 2005.
4. Multi-variable ENSO Index: (<http://www.cdc.noaa.gov/people/klaus.wolter/MEI/>)
5. Sea Surface Temperature departure forecasts: (http://www.cpc.ncep.noaa.gov/products/people/wwang/cfs_fcst/images/glbSSTMonMask.gif)
6. Dr. Landscheidt’s Solar Cycle Model: (<http://www.john-daly.com/theodor/new-enso.htm>)
Sunspot data: (ftp://ftp.ngdc.noaa.gov/STP/SOLAR_DATA/SUNSPOT_NUMBERS/MONTHLY)

Winter 2005 - 2006 Climate Forecast for Portland:

Month:	Temperature (mean monthly):	"Hedge"	Precipitation (% normal):	"Hedge"
November	Near Normal (-1.8 to + 1.8 degF)	-0.8	Below Normal (70 - 90%)	86%
December	Near Normal (-1.8 to + 1.8 degF)	-0.1	Near Normal (90 - 110%)	94%
January	Near Normal (-1.8 to + 1.8 degF)	-0.4	Below Normal (70 - 90%)	86%
February	Near Normal (-1.8 to + 1.8 degF)	-0.6	Near Normal (90 - 110%)	97%
March	Near Normal (-1.8 to + 1.8 degF)	-0.1	Near Normal (90 - 110%)	98%

Snow (% probability): November 30%, December 65%, January 81%, February 77%, March 77%.

Snow (inch): Nov. 0.2 (+/- 0.6), Dec. 1.1 (+/- 1.4), Jan. 4.7 (+/- 5.0), Feb. 3.5 (+/- 4.2), March 0.5.

Water Supply Eorecast (Columbia River at The Dalles), January - July 2006, Million-Acre-Feet:

Multi-variable ENSO Index (regressed vs. Col. R. at The Dalles WSF): **99 MaF** or 92% of normal.

UW-CIG VIC Hydro model (run through regression): **106 - 107 MaF** or 99 - 100% of normal.

Winter 2004 – 2005, Kyle's Climate Forecast vs. Observed Data for Portland:

Month:	Temperature (mean monthly):	"Hedge"	Observed	Precipitation (% normal):	"Hedge"	Observed
November	Near Normal (-1.8 to + 1.8 degF)	0.4	0	Below Normal (70 - 90%)	75%	42%
December	Near Normal (-1.8 to + 1.8 degF)	0.3	2.9	Near Normal (90 - 110%)	97%	68%
January	Near Normal (-1.8 to + 1.8 degF)	0.7	1.8	Near Normal (90 - 110%)	100%	39%
February	Above Normal (> +1.8 degF)	2	0.4	Near Normal (90 - 110%)	89%	31%
March	Above Normal (> +1.8 degF)	1.3	2.8	Near Normal (90 - 110%)	89%	102%
average:		0.9	1.6	average:		90% 56%

WY 2005 Water Resources Forecast: predicted 94 MaF vs. the observed, unregulated, 81 MaF.